

WHAT IS CLAIMED IS:

- 1        1.     A method for providing automated tracking of security vulnerabilities,  
2 comprising:
  - 3              performing a vulnerability assessment on a system;
  - 4              storing data obtained from the vulnerability assessment in a vulnerability  
5 database;
  - 6              determining a vulnerability score based on a plurality of vulnerability factors  
7 identified by the vulnerability assessment; and
  - 8              determining a time to fix a vulnerability identified by the vulnerability assessment  
9 of the system based on the determined vulnerability score.
- 1        2.     The method of claim 1, wherein determining the vulnerability factor  
2 further comprises considering the frequency the identified vulnerability occurs in the  
3 system.
- 1        3.     The method of claim 2, wherein determining the vulnerability factor  
2 further comprises the criticality of an element in the system presenting the vulnerability  
3 and a rating of the severity of the vulnerability.
- 1        4.     The method of claim 1 further comprising determining an IP address  
2 associated with the vulnerability.

1           5.       The method of claim 4 further comprising entering the IP address and a  
2       description of the identified vulnerability in a tracking database.

1           6.       The method of claim 1 further comprising determining delinquent  
2       vulnerabilities based upon the determined time to fix the vulnerability identified by the  
3       vulnerability assessment.

1           7.       The method of claim 6 further comprising providing notification of  
2       determined delinquencies.

1           8.       The method of claim 6 further comprising re-running a scan profile when  
2       notification is received that the vulnerability has been fixed.

1           9.       The method of claim 8 further comprising determining whether the  
2       vulnerability still exists and archiving records associated with the vulnerability when the  
3       vulnerability does not still exist.

1           10.      A method for determining a criticality factor for a vulnerability in a  
2       computer system, comprising:  
3                  entering in a database vulnerabilities identified during a vulnerability assessment;  
4                  monitoring a frequency of occurrence for the identified vulnerabilities; and  
5                  assigning a vulnerability factor to a vulnerability based upon the frequency of  
6       occurrence of the vulnerability in the system.

1           11.     The method of claim 10, wherein the assigning a vulnerability factor  
2     further comprises considering a criticality of an element in the system presenting the  
3     vulnerability and a rating of the severity of the vulnerability within the system.

1           12.     An apparatus for providing automated tracking of security vulnerabilities,  
2     comprising:  
3                 a memory for storing program instructions; and  
4                 a processor, configured according to the program instructions for performing a  
5     vulnerability assessment on a system, storing data obtained from the vulnerability  
6     assessment in a vulnerability database, determining a vulnerability score based on a  
7     plurality of vulnerability factors identified by the vulnerability assessment and  
8     determining a time to fix a vulnerability identified by the vulnerability assessment of the  
9     system based on the determined vulnerability score.

1           13.     The apparatus of claim 12, wherein the processor considers a frequency of  
2     the identified vulnerability in the system when determining the vulnerability factor.

1           14.     The apparatus of claim 13, wherein the processor further considers the  
2     criticality of an element in the system presenting the vulnerability and a rating of the  
3     severity of the vulnerability when determining the vulnerability factor.

1           15.     The apparatus of claim 12, wherein the processor determines an IP address  
2     associated with the vulnerability.

1           16.     The apparatus of claim 15, wherein the processor enters the IP address and  
2        a description of the identified vulnerability in a tracking database.

1           17.     The apparatus of claim 12, wherein the processor identifies delinquent  
2        vulnerabilities based upon the determined time to fix the vulnerability identified by the  
3        vulnerability assessment.

1           18.     The apparatus of claim 17, wherein the processor provides notification of  
2        the identified delinquencies.

1           19.     The apparatus of claim 17, wherein the processor re-runs a scan profile  
2        when notification is received that the vulnerability has been fixed.

1           20.     The apparatus of claim 19, wherein the processor determines whether the  
2        vulnerability still exists and archives records associated with the vulnerability when the  
3        vulnerability does not still exist.

1           21. An apparatus for determining a criticality factor for a vulnerability in a  
2 computer system, comprising:

3                 a memory for storing program instructions; and  
4                 a processor, configured according to the program instructions for entering in a  
5 database vulnerabilities identified during a vulnerability assessment, monitoring a  
6 frequency of occurrence for the identified vulnerabilities and assigning a vulnerability  
7 factor to a vulnerability based upon the frequency of occurrence of the vulnerability in  
8 the system.

1           22. The apparatus of claim 21, wherein the processor considers a criticality of  
2 an element in the system presenting the vulnerability and a rating of the severity of the  
3 vulnerability within the system when assigning a vulnerability factor.

1           23. An apparatus for providing automated tracking of security vulnerabilities,  
2 comprising:  
3                 means for storing program instructions; and  
4                 means configured according to the program instructions provided by the means  
5 for storing for performing a vulnerability assessment on a system, storing data obtained  
6 from the vulnerability assessment in a vulnerability database, determining a vulnerability  
7 score based on a plurality of vulnerability factors identified by the vulnerability  
8 assessment and determining a time to fix a vulnerability identified by the vulnerability  
9 assessment of the system based on the determined vulnerability score.

1           24. An apparatus for determining a criticality factor for a vulnerability in a  
2 computer system, comprising:  
3           means for storing program instructions; and ✓  
4           means configured according to the program instructions provided by the means  
5 for storing for entering in a database vulnerabilities identified during a vulnerability  
6 assessment, monitoring a frequency of occurrence for the identified vulnerabilities and  
7 assigning a vulnerability factor to a vulnerability based upon the frequency of occurrence  
8 of the vulnerability in the system.

1           25. A program storage device readable by a computer, the program storage  
2 device tangibly embodying one or more programs of instructions executable by the ✓  
3 computer to perform a method for providing automated tracking of security  
4 vulnerabilities, the method comprising:  
5           performing a vulnerability assessment on a system;  
6           storing data obtained from the vulnerability assessment in a vulnerability  
7 database;  
8           determining a vulnerability score based on a plurality of vulnerability factors  
9 identified by the vulnerability assessment; and  
10          determining a time to fix a vulnerability identified by the vulnerability assessment  
11 of the system based on the determined vulnerability score.

1           26. A program storage device readable by a computer, the program storage  
2       device tangibly embodying one or more programs of instructions executable by the  
3       computer to perform a method for determining a criticality factor for a vulnerability in a  
4       computer system, the method comprising:  
5           entering in a database vulnerabilities identified during a vulnerability assessment;  
6           monitoring a frequency of occurrence for the identified vulnerabilities; and  
7           assigning a vulnerability factor to a vulnerability based upon the frequency of  
8       occurrence of the vulnerability in the system.